# University of California, San Francisco CURRICULUM VITAE

Name: Theodore W Kurtz, MD

**Position:** Professor In Residence, Step 9

Laboratory Medicine School of Medicine

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University of California, San Francisco

San Francisco, CA 94107

#### **EDUCATION**

1971 - 1975	University of Michigan	B.S.	Zoology
1975 - 1979	University of Michigan	M.D.	Medicine
1980 - 1982	Univ. of California, San Francisco	Resident	Laboratory Medicine
1982 - 1983	Univ. of California, San Francisco	Chief Resident	Laboratory Medicine

# LICENSES, CERTIFICATION

1981 Medical licensure, California # G46628

1984 Certified, American Board of Pathology, Clinical Pathology

#### PRINCIPAL POSITIONS HELD

1983 - 1984	Univ. of California, San Francisco	Asst. Clinical Professor	Laboratory Medicine
1984 - 1987	Univ. of California, San Francisco	Asst. Professor in Residence	Laboratory Medicine
1987 - 1992	Univ. of California, San Francisco	Assoc. Professor in Residence	Laboratory Medicine
1992 - present	Univ. of California, San Francisco	Professor in Residence	Laboratory Medicine

# OTHER POSITIONS HELD CONCURRENTLY

1985 - 1987	Univ. of California, San Francisco	Assistant	General Clinical
		Director	Research Center

1987 - present UCSF Medical Center Director Clinical

Chemistry Laboratories

1997 - present	Univ. of California, San Francisco	Vice-Chair	Laboratory Medicine
1998 - present	Univ. of California, San Francisco	Affiliate Faculty	Institute for Human Genetics
1999 - present	Univ. of California, San Francisco	Member	Cardiovascular Research Institute
2000 - 2002	American Society of Hypertension	President	

# **HONORS AND AWARDS**

1975	James B. Angell Scholar	University of Michigan
1976	Outstanding Research Fellow	Michigan Heart Association
1979	Dean's Award for Research Excellence	University of Michigan
1993	Clinical Investigator Award	National Heart, Lung, and Blood Institute, NIH
1994	SmithKline Beecham Young Investigator Award	International Society of Hypertension
2000	President	American Society of Hypertension
2006	Novartis Award for Hypertension Research	American Heart Association, Council for High Blood Pressure Research
2010	International Okamoto Research Award	Japan Vascular Disease Research Foundation
2013	Outstanding Contributions to Clinical Chemistry in Education	Northern California Section, American Association of Clinical Chemistry

# **KEYWORDS/AREAS OF INTEREST**

Molecular genetics, complex diseases, hypertension, salt sensitivity, metabolic syndrome, diabetes, cardiovascular disease, transgenic strains, congenic strains, conplastic strains, clinical chemistry, electrolyte metabolism

# **CLINICAL ACTIVITIES**

## **CLINICAL SERVICES**

1987 - present	Medical Director and Clinical Attending, Clinical Chemistry section of the UCSF Clinical Laboratories at Parnassus and China Basin	
2014 - present	Member, Clinical Laboratory Compliance Committee covering UCSF Moffitt-Long, Mission Bay, and Mt Zion Medical Centers	Biannually

2014 - present	Member, Quality Improvement Committee, UCSF China Basin Clinical Laboratories	Quarterly
2014 - present	Member, Quality Improvement Committee, UCSF Parnassus Clinical Laboratory	Quarterly
2014 - present	Member, Core Quality Improvement Committee, UCSF Clinical Laboratories	Biannually

# **PROFESSIONAL ACTIVITIES**

## **MEMBERSHIPS**

1985 - present American Society of Hypertension/American Heart Association Hypertension Council

1990 - present International Society of Hypertension

# **SERVICE TO PROFESSIONAL ORGANIZATIONS**

1996 - 2004	American Society of Hypertension	Member, Executive Council
1998 - 2000	American Society of Hypertension	President-Elect
1998 - 2005	American Society of Hypertension	Member, Scientific Program Committee
1998 - 2007	International Society of Hypertension	Member, Scientific Program Committee
1998 - 2001	American Heart Association, Western States Affiliate	Member, Research Committee
1998 - 2010	American Heart Association Council on Hypertension	Member, Abstract Grading Panel
2000 - 2002	American Society of Hypertension	President
2000 - 2004	American Society of Hypertension	Member, Finance Committee
2000 - 2001	International Society for Cardiovascular Endocrinology and Metabolism, Cairns, Australia	Member, Executive Board of Satellite Program Organizing Committee
2001 - 2003	American Heart Association Council on Hypertension	Member, Executive Committee
2001 - 2002	International Symposium on Obesity and Hypertension, Berlin	Member, Program Committee

2001 - 2002	International Symposium on SHR and Molecular Medicine, Berlin	Member, International Advisory Board
2001 - 2002	International Society of Hypertension Satellite Symposium on Genetics of Human and Experimental Hypertension	Member, Program Committee
2001 - 2003	American Society of Hypertension	Chair, Corporate Affairs Committee
2001 - 2003	American Society of Hypertension	Chair, Strategic Planning Committee
2002 - 2003	International Symposium on Atherosclerosis, Kyoto, Japan	Member, Organizing Committee
2003 - 2006	American Society of Hypertension	Chair, Chapter Relations Committee
2003 - 2004	American Society of Hypertension	Chair, Nominating Committee
2004 - 2006	American Society of Hypertension	Member, Nominating Committee
2004 - 2006	American Society of Hypertension	Member, Abstract Selection Committee
2005 - 2006	American Heart Association	Chair, Writing Group Committee on BP Measurements in Animal Models
2005 - 2006	American Heart Association	Member, Writing Group Committee on BP Measurements in Humans
2005 - 2006	American Society of Hypertension	Member, Finance Committee
2005 - 2006	International Society of Hypertension	Chair, Satellite Symposium on the Metabolic Syndrome
2006 - 2010	AHA Council for High Blood Pressure Research	Member, Novartis Awards Committee
2006 - 2007	International Symposium on the Metabolic Syndrome, Osaka, Japan	Chair, Organizing Committee

2014 - 2014	International Symposium on the Metabolic Syndrome, Osaka, Japan	Chair, Organizing Committee
2014 - 2014	International Society of Hypertension	Member, Abstract Grading Committee
2008 - 2016	International Symposium on the Metabolic Syndrome, Osaka, Japan	Member, Organizing Committee
2009 - 2016	American Society of Hypertension	Member, Abstract Grading Committee
2015 - 2017	Genetics/SHR Satellite Meeting of the International Society of Hypertension	Chair, Organizing Committee
2017 - 2018	American Heart Association	Member, Scientific Statement Writing Group Committee: Animal Models of Hypertension
2006 - present	International Meeting on the SHR: Etiology of Genetic Hypertension	Member, Organizing Committee
2011 - present	American Heart Association Council on Hypertension	Member, Abstract Grading Committee
2018 - present	American Heart Association Council on Hypertension	Member, Awards Selection Committee
2018 - present	Japan Research Foundation for Healthy Aging	Member, Award Selection Committee

# **SERVICE TO PROFESSIONAL PUBLICATIONS**

1991 - present	Ad hoc referee for Nature, Science, Journal of Clinical Investigation; Am Journal of Physiology; Circulation, Circulation Research; American Journal of Hypertension; Cardiovascular Drugs and Therapy; Nature Genetics; Hypertension; Journal of Hypertension; Journal of Cardiovascular Pharmacology; Arteriosclerosis, Thrombosis, and Vascular Biology, Diabetes, New England Journal of Medicine, Hypertension Research, Clinical and Experimental Hypertension, Epigenetics, Trends in Cardiovascular Medicine, Scientific Reports, PLOS One, FEBS Letters, PNAS, Kidney International, Journal of the American Society of Nephrology
2003 - 2004	Secretary, American Journal of Hypertension
2000 - 2007	Editorial Board, American Journal of Hypertension
2005 - 2008	Editorial Board, Journal of Hypertension
2011 - 2012	Guest Editor, Experimental Diabetes Research

2014 - 2015 Member, Search Committee for Editor-in-Chief of the American Journal of Hypertension
1999 - 2016 Editorial Board, Physiological Genomics
1991 - present Editorial Board, Hypertension
2009 - present Associate Editor, Hypertension Research
2013 - present Executive Board, American Journal of Hypertension
2014 - present Treasurer, American Journal of Hypertension

#### **INVITED PRESENTATIONS - INTERNATIONAL**

SENTATIONS - INTERNATIONAL
Invited Lecture: New Treatment Strategies for Hypertensive Patients with Insulin Resistance. Thailand Society of Hypertension, Bangkok, Thailand, Feb 18, 2005
Invited Lecture: Treating Insulin Resistance, Hypertension and the Metabolic Syndrome. South African Society of Hypertension, Cape Town, South Africa, March 6, 2005
Invited Lecture: New Approaches to Insulin Resistance and Hypertension. 15th Clinical Endocrine Metabolism Update, Sapporo, Japan, March 12, 2005
Invited Lecture: Treating Insulin Resistance, Hypertension, and the Metabolic Syndrome. Division of Nephrology, Endocrinology, and Vascular Medicine, Sendai University, Sendai, Japan, March 14, 2005
Invited Lecture: Selective PPAR Modulators That Block the Angiotensin II Receptor. 3rd International Symposium on PPARs, Monte Carlo, Monaco, March 23, 2005
Invited Lecture: Metabolic Effects of ARBs Beyond Renin Angiotensin System Blockade: Are All Molecules the Same? Satellite Symposium of the German Society of Cardiology, Mannheim, Germany, April 1, 2005
Invited Lecture: New Evidence for Antidiabetic Effects of Angiotensin Receptor Blockers. VIII International Forum on the Renin-Angiotensin System, Capri, Italy, April 15-16, 2005
Invited Session Chair: Molecular Genetics of Hypertension. VIII International Forum on the Renin-Angiotensin System, Capri, Italy, April 15-16, 2005
Invited Lecture: Metabolic Effects of Inhibiting the Renin- Angiotensin System: New Perspectives. Boehringer- Ingelheim Symposium on Pharmacologic Therapy for Diabetes Mellitus and Arterial Hypertension: Fermo, Italy, April 27, 2005

2005	Invited Lecture: Antidiabetic Effects of Angiotensin Receptor Blockers. CME Course on Hypertension and Associated Risk Factors, Regello, Italy, April 28, 2005
2005	Invited Lecture: Metabolic Effects of Renin Angiotensin System Blockade. Medicine Grand Rounds, Hospital Maisonneuve-Rosemont, Montreal, Quebec, May 31, 2005
2005	Invited Lecture: Treatment of Insulin Resistance, Hypertension, and Metabolic Syndrome.Nephrology Grand Rnds, Hopital Notre Dame, Univ of Montreal, Quebec, May 31, 2005
2005	Invited Lecture: New Approaches to Insulin Resistance, Hypertension, and the Metabolic Syndrome. Medicine Grand Rounds, Hopital Fleurimont, Sherbrooke, Canada, June 1, 2005
2005	Invited Lecture: Treatment of Insulin Resistance, Hypertension, and the Metabolic Syndrome. Cardiology Grand Rounds, the Royal Victoria Hospital and University of Montreal, Montreal, Canada, June 2,
2005	Invited Lecture: New Approaches to Hypertension and the Metabolic Syndrome. Medicine Grand Rounds, the Jewish General Hospital, Montreal, Quebec, June 2, 2005
2005	Invited Lecture: Antidiabetic Effects of Angiotensin Receptor Blockers. Satellite Symposium of the European Society of Cardiology. Stockholm, Sweden, Sept 6, 2005
2005	Invited Lecture: New Treatment Strategies for Hypertensive Patients with Insulin Resistance. Cardiology Grand Rounds, London Health Sciences, University Campus, London, Ontario, Sept 26, 2005
2005	Invited Lecture: Antidiabetic Effects of ARBs: Are All Molecules the Same? Internal Medicine Grand Rounds, London Health Sciences, Victoria Campus, London, Ontario, Sept 26, 2005
2005	Invited Lecture: Metabolic Benefits of Antihypertensive Therapy Beyond AT1 Receptor Blockade, 7th Meeting on Diabetes and Cardiovascular Risk Factors, Hong Kong, October 2, 2005
2005	Invited Lecture: Antidiabetic Effects of ARBs: Are All Molecules the Same? Research Seminar, Osaka University Graduate School of Medicine, Osaka, Japan, October 12, 2005

2005	Plenary Lecture: Obesity, Insulin Resistance, and Hypertension. Japan Society for the Study of Obesity, Sapporo, Japan, October 14, 2005
2005	Invited Lecture: New Treatment Strategies for Hypertensive Patients with Insulin Resistance. International Symposium on Cardiovascular Protection, Rio de Janeiro, Brazil, October 22, 2005
2006	Invited Lecture: Treating Insulin Resistance in the Hypertensive Patient. French Society of Cardiology, Paris, France, January 20, 2006
2006	Invited Lecture: New Findings in Metabolic Disorders and the Role of PPAR gamma:Are all ARBs the Same? Spanish Society of Hypertension, Madrid, Spain, March 10, 2006
2006	Invited Lecture: Antidiabetic Effects of ARBs. International Seminar in Endocrinology, Medical Research Institute, Kitano Hospital, Kitano, Japan, March 23, 2006-03-20
2006	Invited Lecture: Mitochondrial Genomics and Therapeutics of the Metabolic Syndrome.Osaka University, Japan, March 24, 2006
2006	Invited Keynote Lecture: Mitochondrial Genomics and Therapeutics of the Metabolic Syndrome, Japanese Circulation Society, Nagoya, Japan, March 26, 2006
2006	Invited Lecture: Cardiometabolic ARBs with Anti-diabetic Effects Independent of Renin-Angiotensin System Blockade. Satellite Symposium of the Norwegian Society of Cardiology, Stavanger, Norway, April 27, 2006
2006	Plenary Lecture: New Opportunities for Treating Insulin Resistance, Hypertension, and the Metabolic Syndrome, Hong Kong College of Cardiology, Hong Kong, May 6, 2006
2006	Invited Lecture: Metabolic Syndrome or Not: Addressing Hypertension and Insulin Resistance, Satellite Meeting of the European Society of Hypertension, Madrid, Spain, June 14, 2006
2006	Invited Lecture: Metabolic Syndrome and Renin Angiotensin System Blockade: New Evidence, New Perspectives, 7th National Congress of Ambulatory Cardiology, Pisa, Italy, June 16, 2006
2006	Invited Lecture: New Opportunities for Treating Insulin Resistance, Hypertension, and the Metabolic Syndrome. Ho Chi Minh City, Vietnam, September 13, 2006

2006 Invited Lecture: New Opportunities for Treating Insulin Resistance, Hypertension, and the Metabolic Syndrome. Hanoi, Vietnam, September 15, 2006 2006 Invited Lecture. Treating Insulin Resistance in Patients with Hypertension. Taiwanese Society of Cardiology, Taipei, Taiwan, September 16, 2006 2006 Plenary Lecture: Pathogenesis and Treatment of the Metabolic Syndrome: Insights From the Mitochondrial Genome. The International Society of Hypertension, Fukuoka, Japan, October 17, 2006 2006 Invited Lecture: Mitochondrial Genomics and Therapeutics of the Metabolic Syndrome, Satellite Symposium of the International Society of Hypertension, Sapporo, Japan, October, 23, 2006 2006 Invited Lecture: New Opportunities for Preventing Diabetes in Patients with Hypertension. Saitama Medical University, Saitama, Japan, December 5, 2006 2007 Invited Lecture: Are the Anti-diabetic Effects of All ACE inhibitors and ARBs the Same? Satellite Symposium of the Belgian Society of Cardiology, Brussels, Belgium Feb 1, 2007 2007 Invited Lecture: New Opportunities for Preventing Diabetes and Cardiovascular Disease in Patients With Hypertension. Korean Society of Nephrology, Seoul, Korea, May 18, 2007 2007 Invited Lecture: New Treatment Strategies for Patients With Hypertension and Insulin Resistance. Clinical Workshop on Hypertension and Related Disease Management, Beijing, China, May 26, 2007 2007 Invited Lecture: New Opportunities for Preventing Diabetes in Patients with Hypertension and the Metabolic Syndrome. Nephrology Division, National University of Malaysia, June 7, 2007 2007 Invited Lecture: New Opportunities for Treating Insulin Resistance, Hypertension, and the Metabolic Syndrome, ASEAN CardioRenal Symposium, Kota Kinabalu, Malaysia, June 9, 2007 2007 Invited Lecture: New Opportunities for Treating Insulin Resistance, Hypertension, and the Metabolic Syndrome, Singapore Medical Society CME Symposium, Singapore, June 10, 2007

2007	Invited Lecture: Cardiovascular and Metabolic Effects of Angiotensin II Receptor Blockers: All Molecules Are Not the Same. International Symposium on Hypertension and the Metabolic Syndrome, Osaka, Japan, June 23, 2007
2007	Invited Lecture: New Opportunities for Preventing Diabetes and Cardiovascular Disease in Patients with Hypertension, 10th International Kitano Endocrinology Symposium, Osaka, Japan, June 25, 2007.?
2007	Invited Lecture: New Opportunities for Preventing Diabetes and Cardiovascular Disease in Patients with Hypertension, Division of Cardiology, Kagoshima University, Kagoshima, Japan, June 26, 2007
2007	Invited Lecture: Current Treatment Approaches and Remaining Needs in Cardiovascular Disease. International Symposium on Cardio & Vascular High-Risk Patients. Tokyo, Japan, July 16, 2007.
2007	Invited Lecture: Beyond the Classical ARB Profile. Department of Geriatric Medicine, Osaka University, Osaka, Japan, July 17, 2007
2007	Invited Lecture: New Perspectives on the Metabolic Syndrome. 8th Congress of the Umbria Regional Association of Ambulatory Cardiologists, Brufa di Torgiano, Italy, November 30, 2007
2007	Invited Lecture: Progress and Promise of Renin Angiotensin System Blockade. 10th Meeting on Geriatric Medicine, Osaka, Japan, December 8, 2007
2007	Invited Lecture: New Opportunities for Preventing Diabetes and Cardiovascular Disease in Patients with Hypertension. Department of Medicine, Kagawa University, Takamatsu, Japan, December 10, 2007
2007	Invited Lecture: Molecule Specific Effects of Angiotensin II Receptor Antagonists: Implications for Clinical Trials with Different ARBs. Sponsored Symposium on Cardiovascular Endocrinology, Kyoto, Japan, December 12, 2007
2008	Invited Lecture: Identification and Management of High Risk Patients: Focus on the Hypertension Metabolic Syndrome. International Symposium on Cardiovascular and Neurovascular Medicine, Hong Kong, February 24, 2008
2008	Invited Lecture: Cardiovascular Effects of ARBs: Are All Molecules the Same? Expert Forum on new Approaches in Cardio and Vascular Protection, Hong Kong, May, 20, 2008

2008	Invited Lecture: Angiotensin Receptor Blockers: Metabolic and Cardiovascular Effects of Angiotensin Receptor Blockers: Are All Molecules the Same? Joint International Symposium of the Journals of the American Society of Hypertension and Chinese Society of Hypertension, Dalian, China, May 22, 2008
2008	Invited Keynote Lecture: Nuclear and Mitochondrial Gene Variants that Influence the Hypertension Metabolic Syndrome: Satellite Symposium of the International Society of Hypertension on the Etiology of Genetic Hypertension and Metabolic Syndrome, Prague, Czech Republic, June 20, 2008
2008	Invited Speaker: Prevention of CV Disease in High Risk Patients, Osaka Symposium on Hypertension and Metabolic Syndrome, Osaka, Japan, June 28, 2008
2008	Keynote Lecture: Mechanisms of Hypertension and the Metabolic Syndrome: Lessons from the Spontaneously Hypertensive Rat. Japanese Society of Hypertension, Sapporo, Japan, October 10, 2008
2008	Invited Speaker: Reducing Metabolic and CV Risk in Patients with Hypertension and the Metabolic Syndrome, Kanazawa University, Kanazawa, Japan, Nov 17, 2008
2008	Invited Speaker: Cardioprotective and Antidiabetic Effects of Angiotensin Receptor Blockers: Fact vs Fiction, Kagoshima University, Kagoshima, Japan, Nov 18, 2008
2009	Invited Speaker: Preventing Diabetes and CV Disease with Antihypertensive Drugs: Current Options and Future Directions. Expert Meeting, Sapporo, Japan, May 19, 2009
2009	Invited Speaker: Beyond Blood Pressure Lowering: Which ARBs Prevent Diabetes and CV Disease in High Risk Patients? Asian-Pacific Cardiovascular Congress, Kyoto, Japan, May 22, 2009
2009	Program Chair: 3rd International Symposium on Hypertension and the Metabolic Syndrome, Osaka, Japan, June 6, 2009
2009	Invited Speaker: The Need for Greater Cardiovascular and Metabolic Protection Beyond Inhibition of the Renin Angiotensin System. 3rd International Symposium on Hypertension and the Metabolic Syndrome, Osaka, Japan, June 6, 2009
2009	Invited Speaker: Identifying New Opportunities for Prevention of Diabetes and CV Disease in Patients with Hypertension. Dept. of Medicine, Chiba University, Chiba, Japan, June 8, 2009

2009	Invited Speaker: Identification of Antihypertensive Agents That Prevent Diabetes and CV Disease in High Risk Patients. Dept. of Medicine, Hiroshima University, June 9, 2009
2009	Invited Speaker: Can Telmisartan Protect Against New Onset Diabetes? European Society of Cardiology Satellite Symposium, Barcelona, Spain, August 31, 2009
2009	Invited Speaker: Novel Mechanisms Regulating Blood Pressure Revealed By Genetic Studies of the Spontaneously Hypertensive Rat. Society for Hypertension Related Disease Model Research, Tokyo, Japan, September 4, 2009
2009	Invited Speaker: Preventing Diabetes and CV Disease in Patients with Hypertension:New Research and Treatment Opportunities. Department of Molecular Pathology, University of Yamanashi, Yamanashi, Japan, September 7, 2009
2009	Keynote Lecture: Is C-Reactive Protein a Marker of Mediator of Metabolic Syndrome, Diabetes, and Risk for Cardiovascular Disease?. Japanese College of Cardiology, Sapporo Japan, September 19, 2009
2009	Invited Lecture: Next Generation Angiotensin Receptor Blockers. Japanese College of Cardiology, Sapporo, Japan, September 19, 2009
2009	Invited Lecture: On the Cutting Edge: New Developments in Treatment of Hypertension and the Metabolic Syndrome. International Symposium on Cardiovascular and Life Style Related Disease, Tokyo, Japan, November 28, 2009
2009	Invited Lecture: Going Beyond Discovery of Genes for Complex Traits: Recent Lessons from Cd36. International Symposium on Rat Genomics and Models. Cold Spring Harbor Laboratory, December 2, 2009
2010	Invited Lecture: Choosing the Ideal Anti-Hypertensive Agent for CV Risk Management: Malaysian Society of Hypertension, Kuala Lumpur, Malaysia, January 29, 2010
2010	Invited Lecture: Next Generation Angiotensin Receptor Blockers. International Congress of Endocrinology, Kyoto, Japan, March 30, 2010
2010	Invited Lecture: Next Generation Angiotensin Receptor Blockers: New Opportunities for Preventing Vascular Injury and Renal Damage. International Society of Nephrology NEXUS Meeting Luncheon Symposium, Kyoto, Japan, April 16, 2010
2010	Invited Lecture: Next Generation ARBs. International Expert Meeting, Juntendo University, Tokyo, Japan, April 20, 2010

2010	Invited Lecture: Next Generation Angiotensin Receptor Blockers. International Expert Meeting, Keio University, Tokyo, Japan, April 21, 2010
2010	Invited Lecture: Molecular Genetics and Therapeutics of Hypertension and the Metabolic Syndrome: Lessons from the Spontaneously Hypertensive Rat. 4th Annual Symposium on Hypertension and the Metabolic Syndrome, Osaka, Japan, June 12, 2010
2010	Invited Lecture: Next Generation Multifunctional ARBs: Beyond the Renin-Angiotensin System. 6th International Conference on the Biology, Chemistry, and Therapeutic Applications of Nitric Oxide, Kyoto, Japan, June 16, 2010
2010	Invited Lecture: Protecting Against CV Events in High Risk Patients: Beyond the Renin-Angiotensin System. Japanese Society of Nephrology, Kobe, Japan, June 17, 2010
2010	Invited Lecture: International Okamoto Award Lecture of the Japan Vascular Disease Research Foundation. 14th International Symposium on the Spontaneously Hypertensive Rat, Montreal, Canada, September 23, 2010
2010	Invited Lecture: Next Generation Angiotensin Receptor Blockers. Division of Cardiovascular Medicine, Juntendo University, Tokyo, Japan, October 27, 2010
2010	Invited Lecture: Molecular Genetics and Therapeutics of the Metabolic Syndrome: Lessons from the Spontaneously Hypertensive Rat. 18th Annual Meeting of the Japanese Vascular Biology and Medicine Organization, Osaka, Japan, December 2, 2010
2011	Invited Lecture: Next Generation Multifunctional ARBs: Beyond the Renin Angiotensin System. International Expert Meeting, Okura Frontier Hotel, Tsukuba, Japan, June 23, 2011
2011	Invited Lecture: Genetic Dissection of the Hypertension Metabolic Syndrome. 5th Annual Hypertension and Metabolic Syndrome Symposium, Osaka, Japan, June 25, 2011
2011	Invited Lecture: Cardiovascular Protection: Pleiotropic Effects of Second Generation Angiotensin Receptor Blockers. Sponsored Symposium, XLIV Venezuela Congress of Cardiology, August 4, 2011
2011	Invited Lecture: Next Generation Angiotensin Receptor Blockers: Beyond the Renin Angiotensin System. Jichi Medical University, Tochigi, Japan, September 29, 2011

2011	Invited Lecture: Next Generation Angiotensin Receptor Blockers: Beyond the Renin-Angiotensin System, Expert Meeting with National Cerebral and Cardiovascular Center of Japan, Osaka, Japan, October 21, 2011
2011	Invited Lecture: Next Generation Angiotensin Receptor Blockers: Beyond the Renin Angiotensin System, Department of Nephrology and Hypertension, Shiga University of Medical Science, Otsu, Shiga, Japan, November 8, 2011
2011	Invited Lecture: Next Generation Angiotensin Receptor Blockers: Beyond the Renin Angiotensin System, Department of Cardiology, Fujita Health University School of Medicine, Toyoake, Aichi, Japan, November 30, 2011
2011	Invited Lecture: Genetic Dissection of the Metabolic Syndrome in Experimental Hypertension, Anti-Aging Society Symposium, Osaka, Japan, December 3, 2011
2012	Invited Lecture: What is the Optimal Drug for Hypertension Treatment? Fukushima Medical University, Fukushima, Japan, March 14, 2012
2012	Keynote Lecture: C-Reactive Protein, Inflammation, and the Metabolic Syndrome, 76th Annual Meeting of the Japanese Circulation Society, Fukuoka, Japan, March 17, 2012
2012	Invited Lecture: What is the Optimal Drug for Hypertension Treatment? Department of Cardiology, Aichi Medical University, Nagoya, Japan, April 12, 2012
2012	Invited Lecture: Angiotensin Receptor Blockers and Cardiovascular Protection. Medellín, Colombia, May 28, 2012
2012	Invited Lecture: The Mitochondrial Genome and Risk for the Metabolic Syndrome. 6th annual Meeting on the Hypertension and Metabolic Syndrome, Osaka, Japan, July 7, 2012
2012	Invited Lecture: What is the Optimal Drug for Hypertension Treatment. 4th Seminar of Molecular Endocrinology and Metabolism, Tokyo Medical and Dental University, Tokyo, Japan, November 15, 2012
2013	Invited Lecture: An Update on CV Protection With Antihypertensive Drugs: Surprising Results from Recent Clinical Trials. Department of Medicine, German Hospital of Santiago, Santiago, Chile, April 24, 2013
2013	Invited Lecture: A Major Revision of the Principal Unifying Theory of Hypertension. 7th Annual International Meeting on Hypertension and Metabolic Syndrome, Osaka, Japan, June 29, 2013

2013	Invited Lecture: A major revision of the principal unifying theory of salt-sensitive hypertension: New emphasis on a causal role for primary abnormalities in vascular resistance. Japanese Vascular Biology and Medicine Organization, Osaka, Japan, September 26, 2013
2014	Invited Lecture: Future Medicine: Beyond Gene Discovery. 14th Annual Meeting of the Japanese Society for Anti-Aging Medicine, Osaka, Japan, June 8, 2014
2014	Invited Lecture: Initiation of Hypertension by Salt or Obesity: What Are the Hemodynamic Mechanisms ?" 8th Annual International Meeting on Hypertension and Metabolic Syndrome, Osaka, Japan, June 28, 2014
2014	Invited Lecture: Risks and Benefits of Antihypertensive Drugs That Block the Renin-Angiotensin System. Department of Medicine, University of Chile, Santiago, Chile, July 14, 2014
2014	Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Laboratory of Integrative Physiology, Millennium Institute of Immunology and Immunotherapy and Chronic Kidney Disease Center, University of Chile, Santiago, July 15, 2014
2014	Invited Lecture: What is the Optimal Drug for Treatment of Hypertension? International Expert Meeting, Eastern Chiba Medical Center, Togane City, Japan, September 8, 2014
2014	Invited Lecture: What is the Optimal Drug for Treatment of Hypertension? International Expert Meeting, Asahi General Hospital, Asahi-city, Japan, September 10, 2014
2015	Invited Lecture: Understanding the Mechanisms of Salt-Sensitivity and Salt-Resistance. Hypertension and Metabolic Syndrome Symposium, Osaka, Japan, June 27, 2015
2015	Invited Lecture: The Vasodysfunction Theory of Salt- Sensitivity - Lessons from Animal Models. 51st Annual Meeting of the Society for Hypertension Related Disease Models Research. Osaka, Japan, October 30, 2015.
2016	Invited Lecture The Vasodysfunction Theory of Salt- Sensitivity. Department of Clinical Pathology and Clinical Laboratories., Tokyo University, Japan, March 4, 2016
2016	Invited Lecture: What Causes Resistance to Salt-Induced Hypertension ? 10th Annual Symposium on Hypertension and the Metabolic Syndrome, Osaka Japan, June 25, 2016
2016	Invited Lecture: A New Theory of Salt-Induced Hypertension: Implications for Clinical Management, International Expert Meeting, Hiroshima, Japan, June 30, 2016

2016 Invited Lecture: Mechanisms of Monogenic and Polygenic Forms of Salt-Sensitivity. Cardiovascular Genetics Satellite Meeting of the International Society of Hypertension and 17th Annual International SHR Symposium. Tokyo, Japan, September 22, 2016

2017 Invited Lecture: Mechanism-Based Functional Foods for the Prevention of Hypertension and Cardiovascular Disease. 65th Annual Meeting of the Japanese College of Cardiology, Osaka, Japan, September 30, 2017

2017 Invited Lecture: A New Unified Mechanism for Salt-Sensitive Hypertension. Japanese Society of Hypertension, Ehime, Japan, October 20, 2017

2017 Invited Lecture: How Does Salt Make the Blood Pressure Go
Up? It's Not What You Have Been Told. Research Center for
Advanced Science and Technology, Division of Clinical
Epigenetics, Tokyo University, Japan, October 23, 2017

2017 Invited Lecture: A New Theory of Salt-Induced Hypertension: Implications for Clinical Management. National Congress of Cardiology, Mexican College of Cardiology, Guadalajara, Mexico, November 3, 2017

#### **INVITED PRESENTATIONS - NATIONAL**

2000 Conference Chair and Organizer, American Society of Hypertension- John Laragh Research Conference on Advances in Hypertension Research: Hypertension and the New Biology of Obesity, Boca Raton, Florida, January 13-15, 2000

2000 Invited Speaker: The Genome Project and Gene Expression Analysis in Hypertension Research: The Rat Genome. The American Heart Association Scientific Sessions, New Orleans, LA, November 12, 2000

2001 Chair and Organizer: New Frontiers in Aldosterone/Mineralocorticoid Biology: A Reemerging Force in Target Organ Damage and Hypertension. John H. Laragh Conference on Advances in Hypertension Research, American Society of Hypertension, Scottsdale, AZ, January 11-13, 2001

2001 Invited Speaker: Genetics of Hypertension. The American Society of Hypertension Clinical Review Course in Hypertension, Chicago, IL, March 24, 2001

2001	Invited Speaker: Use of Congenic Strains, Transgenic Strains, and cDNA Microarrays to Identify Hypertension Related QTLs at the Molecular Level. American Heart Association Workshop on Genetics and Genomics and Their Approaches to Understanding Mechanisms of Hypertension and Cardiovascular Disease, Chicago, IL Sept 22, 2001
2001	Invited Speaker: Genetics of Risk Factor Clustering in Experimental Hypertension. The American Society of Human Genetics - Session on the Genetics of Hypertension, 51st Meeting of the American Society of Human Genetics, San Diego, CA October 13, 2001
2002	Chair and Program Director: American Society of Hypertension 3rd Annual Laragh Conference on Advances in Hypertension Research: Target Organ Damage in Hypertension: Mechanisms, Prevention, and Management, Palm Beach, FL, January 31-February 2, 2002
2002	Invited Speaker: Using Congenic and Transgenic Strains to Understand the Molecular Pathophysiology of Syndrome X and Hypertension. The American Physiological Society, Experimental Biology Meetings 2002, New Orleans, LA, April 22, 2002
2002	Invited Chair: Gene Environment Interactions in Obesity. Physiology InFocus session of American Physiological Society, 2002, New Orleans, LA, April 21, 2002
2003	Invited Speaker: Genetics of Hypertension: Implications for Clinical Practice. American Society of Hypertension, Clinical Hypertension Course, New Orleans, LA, Feb 14, 2003
2003	Invited Speaker: Discovery of Novel ARBs That Specifically Target Insulin Resistance and the Dysmetabolic Syndrome. 18th Annual Scientific Meeting of the American Society of Hypertension, New York, New York, May 16, 2003
2003	Invited Speaker: The Metabolic Syndrome and Renal Disease: Molecular Mechanisms and Emerging Therapeutic Approaches. American Society of Nephrology Postgraduate Education Course, San Diego, CA, November 12, 2003
2003	Invited Speaker: Genetics, Hypertension, and the Kidney. American Society of Nephrology Postgraduate Education Course, San Diego, CA, November 12, 2003
2004	Invited Chair: Physiological Genomics in Hypertension and Cardiovascular Medicine. The American Society of Hypertension, New York, NY, May 20, 2004

2004	Invited Lecture: Molecular Genetics and Therapeutics of the Hypertension Metabolic Syndrome. Renal Week Symposium on Genetics, Race, and Cardiovascular/Renal Disease, the American Society of Nephrology, St. Louis, Missouri, October 30, 2004
2005	Invited Chair: Clues to the Etiology of Hypertension from Genetics to Genomics. The American Society of Hypertension, San Francisco, CA, May 16, 2005
2006	Novartis Award Lecture of the Council for High Blood Pressure Research of the American Heart Association. Molecular Genetics and Therapeutics of the Hypertension Metabolic Syndrome: Insights From Genetic Models, San Antonio, TX, Oct 6, 2006
2007	Invited Lecture: Potential Role of Renin Angiotensin System Blockade in Cardiometabolic Risk Management. National Education Summit of the Vascular Biology Working Group, Orlando, FL, November 16, 2007
2010	Invited Presentation: Genome Wide Association Studies in Unlocking the Genetic Basis of Human Hypertension: Strengths and Limitations, American Society of Hypertension, May 2010
2010	Invited Presention: Next Generation ARBs, Takeda Pharmaceuticals North America, Deerfield, IL, September 15, 2010
2011	Invited Presentation: Genetics of Experimental Hypertension: Translation to Humans, American Society of Hypertension, New York, New York, May 21, 2011
2011	Invited Presentation: Cd36 Expression as Genetic Determinant of Risk for Hypertension, American Society of Nephrology, Philadelphia, PA, November 12, 2011
2011	Invited Presentation: Next Generation Angiotensin Receptor Blockers, Takeda Pharmaceuticals North America, Chicago, Illinois, December 7, 2011
2012	Invited session chair and speaker: Unifying Theories of Hypertension, Workshop of the AHA Council for High Blood Pressure Research, Washington DC, September 19, 2012
2013	Invited Presentation: Genetic Determinants of the Risk for Hypertension and Metabolic Syndrome in the Spontaneously Hypertensive Rat. Heart and Kidney Institute, College of Pharmacy, University of Houston, Houston, Texas, April 3, 2013

2013 Invited Lecture: The Pathogenesis of NaCl-Induced
Hypertension: How Did Genetics Lead us Astray? Cold
Spring Harbor Laboratory International Meeting on Rat

Genomics and Models, Cold Spring Harbor, New York,

December 13, 2103

2014 Invited Lecture: How Does NaCl Make the Blood Pressure Go

Up? Department of Physiology, Wayne State University

School of Medicine, September 9, 2014

2014 Invited Lecture: How Does NaCl Make the Blood Pressure Go

Up? It's Not What You've Been Told By Either the Renal Physiologists or Molecular Geneticists. Frontiers in Cardiovascular Science Seminar, University of Michigan Cardiovascular Center, Ann Arbor, Michigan, September 13,

2014

2017 Invited Lecture: How Does NaCl Make the Blood Pressure Go

Up? It's Not What You've Been Told by Either the Renal

Physiologists or Molecular Geneticists. Center for

Hypertension Research and the Abboud Cardiovascular Research Center, University of Iowa College of Medicine,

March 31, 2017

2017 Invited Lecture: How Does Salt Make the Blood Pressure Go

Up? It's Not What You've Been Told. Center for Clinical and Translational Science, Rockefeller University, New York,

September 27, 2017

#### INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS

2000 Invited Speaker: Genetic Dissection of Insulin Resistance,

Dyslipidemia, and Hypertension using cDNA Microarrays, Congenic Strains, and Transgenic Strains. Department of Nutritional Science, University of California, Berkeley, October

4, 2000

2000 Invited Speaker: Clustering of Insulin Resistance,

Dyslipidemia, and Hypertension: New Insights into Primary Mechanisms of Syndrome X. The Jackson Cardiovascular-Renal Meeting, The University of Mississippi, Jackson MS,

November 8-11, 2000

2001 Invited Speaker: Clustering of Insulin Resistance,

Dyslipidemia, and Hypertension: New Insights into Primary

Genetic Mechanisms of Experimental Syndrome X.

Endocrinology Grand Rounds, University of California, San

Francisco, February 14, 2001

2001	Invited Speaker: Genetic Determinants of Hypertension Induced Renal Damage. The Southern Society of Clinical Investigation, New Orleans, LA, March 1, 2001
2001	Invited Seminar: Genetics of Experimental Hypertension and Target Organ Damage. Program in Vascular Biology, Department of Physiology, State University of New York, Stony Brook, NY, April 26, 2001
2001	Invited Speaker: Genetics, Hypertension, and the Kidney, Nephrology Grand Rounds, Stanford University Medical Center, November 29, 2001
2002	Invited Speaker: Mechanisms of the Hypertension Metabolic Syndrome X, Department of Medicine Grand Rounds, Loyola University, Chicago, ILL, March 19, 2002
2002	Medical Staff Conference: Problems in Hypertension Management. Kern Medical Center, Bakersfield, CA, Nov 7, 2002
2003	Invited Speaker: Identification of Angiotensin II Receptor Antagonists With Selective PPAR gamma Modulating Activity. Pfizer Central Research, Ann Arbor, Michigan, December 9, 2003
2004	Invited Speaker: Beyond QTL Mapping: Identification of QTL at the Molecular Level. UCSF Program in Human Genetics, San Francisco, CA, January 12, 2004
2004	Invited Speaker: Identifying QTL at the Molecular Level by Genome Scanning of Congenic and Recombinant Inbred Strains. Vascular Biology Program, Department of Pathology, University of Washington, Seattle, WA, March 26, 2004
2004	Invited Speaker: The Influence of Rapp's Paradigm on the Field of Experimental Hypertension Research. International Cardiovascular Genomics Symposium, Medical College of Ohio, May 17, 2004
2004	Invited Lecture: Identification of New Treatment Strategies for Insulin Resistant Hypertension and the Metabolic Syndrome. Endocrinology Grand Rounds, Stanford University, October 20, 2004
2004	Invited Lecture: Treating Insulin Resistant Hypertension and the Metabolic Syndrome. Boehringer Ingelheim Co. Advisory Board, Toronto, Canada, November 27, 2004
2005	Invited Lecture: Identification of New Treatment Strategies for Insulin Resistance, Hypertension, and the Metabolic Syndrome. Georgetown University Nephrology

Syndrome: New Insights from the Mitochondrial Genome. Department of Nutritional Sciences and Toxicology, University of California, Berkeley, CA, September 12, 2007  Invited Lecture: Molecular Genetics and Therapeutics of the Hypertension Metabolic Syndrome: Insights from Genetic Models. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, CA, April 23, 2008  Invited Lecture: Searching for Novel Renal Mechanisms of Hypertension. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, August 12, 2009  Invited Lecture: Molecular Genetics and Therapeutics of the Metabolic Syndrome: Insights from Genetic Models, Department of Pathology and Laboratory Medicine, University of California, Irvine, January 8, 2010  Leonard Share Memorial Lecture: E.E. Muirhead.Hypertension Research Day, University of Tennessee Health Science Center, Memphis, Tennessee, November 3, 2010  Invited Lecture: Are You Using the Wrong Diuretic for Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, September 5, 2012  Invited Lecture: Genetics of Common and Rare Forms of Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  Seminar: Genetics of Common and Rare Forms of	2006	Invited Lecture: Translational Genomics and Therapeutics of Hypertension and Type 2 Diabetes. Grand Rounds, UCSF Department of Laboratory Medicine, April 3, 2006
Syndrome: New Insights from the Mitochondrial Genome. Department of Nutritional Sciences and Toxicology, University of California, Berkeley, CA, September 12, 2007  Invited Lecture: Molecular Genetics and Therapeutics of the Hypertension Metabolic Syndrome: Insights from Genetic Models. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, CA, April 23, 2008  Invited Lecture: Searching for Novel Renal Mechanisms of Hypertension. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, August 12, 2009  Invited Lecture: Molecular Genetics and Therapeutics of the Metabolic Syndrome: Insights from Genetic Models, Department of Pathology and Laboratory Medicine, University of California, Irvine, January 8, 2010  Leonard Share Memorial Lecture: E.E. Muirhead. Hypertension Research Day, University of Tennessee Health Science Center, Memphis, Tennessee, November 3, 2010  Invited Lecture: Are You Using the Wrong Diuretic for Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, September 5, 2012  Invited Lecture: Genetics of Common and Rare Forms of Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  Seminar: Genetics of Common and Rare Forms of Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2007	Research Seminar, Nephrology Division, University of
Hypertension Metabolic Syndrome: Insights from Genetic Models. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, CA, April 23, 2008  2009 Invited Lecture: Searching for Novel Renal Mechanisms of Hypertension. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, August 12, 2009  2010 Invited Lecture: Molecular Genetics and Therapeutics of the Metabolic Syndrome: Insights from Genetic Models, Department of Pathology and Laboratory Medicine, University of California, Irvine, January 8, 2010  2010 Leonard Share Memorial Lecture: E.E. Muirhead.Hypertension Research Day, University of Tennessee Health Science Center, Memphis, Tennessee, November 3, 2010  2012 Invited Lecture: Are You Using the Wrong Diuretic for Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, September 5, 2012  2014 Invited Lecture: Genetics of Common and Rare Forms of Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  2014 Seminar: Genetics of Common and Rare Forms of Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  2014 Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2007	Department of Nutritional Sciences and Toxicology, University
Hypertension. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, August 12, 2009  Invited Lecture: Molecular Genetics and Therapeutics of the Metabolic Syndrome: Insights from Genetic Models, Department of Pathology and Laboratory Medicine, University of California, Irvine, January 8, 2010  Leonard Share Memorial Lecture: E.E. Muirhead.Hypertension Research Day, University of Tennessee Health Science Center, Memphis, Tennessee, November 3, 2010  Invited Lecture: Are You Using the Wrong Diuretic for Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, September 5, 2012  Invited Lecture: Genetics of Common and Rare Forms of Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  Seminar: Genetics of Common and Rare Forms of Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2008	Hypertension Metabolic Syndrome: Insights from Genetic Models. Renal Grand Rounds, Department of Medicine,
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Muirhead.Hypertension Research Day, University of Tennessee Health Science Center, Memphis, Tennessee, November 3, 2010  Invited Lecture: Are You Using the Wrong Diuretic for Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, September 5, 2012  Invited Lecture: Genetics of Common and Rare Forms of Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  Seminar: Genetics of Common and Rare Forms of Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2010	Metabolic Syndrome: Insights from Genetic Models, Department of Pathology and Laboratory Medicine, University
Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California, San Francisco, September 5, 2012  Invited Lecture: Genetics of Common and Rare Forms of Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  Seminar: Genetics of Common and Rare Forms of Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2010	Muirhead.Hypertension Research Day, University of Tennessee Health Science Center, Memphis, Tennessee,
Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of California, Davis, February 24, 2014  Seminar: Genetics of Common and Rare Forms of Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2012	Hypertension? Chlorthalidone vs. HCTZ. Renal Grand Rounds, Department of Medicine, University of California,
Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco, March 3, 2014  Invited Lecture: Misconceptions About the Genetics and Renal Mechanisms of NaCl-Induced Hypertension.  Nephrology Grand Rounds, Department of Medicine,	2014	Hypertension. Seminar in Human Genetics for the Integrative Genetics and Genomic Graduate Group, University of
Renal Mechanisms of NaCl-Induced Hypertension. Nephrology Grand Rounds, Department of Medicine,	2014	Hypertension: Why the Lack of Mechanistic Insights? Institute of Human Genetics, University of California, San Francisco,
	2014	Renal Mechanisms of NaCl-Induced Hypertension.  Nephrology Grand Rounds, Department of Medicine,

# **CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT ACTIVITIES**

2010	American Society of Hypertension
2012	American Society of Hypertension
2013	American Society of Hypertension
2014	American Heart Association Council for High Blood Pressure Research
2017	American Heart Association Hypertension Council

# **GOVERNMENT AND OTHER PROFESSIONAL SERVICE**

NIH Expert Panel on Genetic Strategies for Heart, Lung, and Blood Diseases  NIH Experimental Cardiovascular Sciences Study Section  Reviewer, ad hoc  NIH/NIDDK Review Panel on Diabetic and Non-Diabetic Susceptibility Genes  NIH Special Emphasis Panel on Minority Research Training  NIH Special Emphasis Panel on Experimental Committee Member  NIH Special Emphasis Panel on Experimental Committee Member  NIH Review Panel: SCOR Programs on Molecular Committee Genetics of Hypertension Member  NIH/NHLBI Expert Panel on Future Directions in Hypertension Research Member  NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications Member  NIH/NHLBI Clinical and Integrative Cardiovascular Science Study Section  NIH/NHLBI RFA Challenge Grants Panel Review Reviewer, ad hoc Study Section  NIH/NHLBI RFA Challenge Grants Panel Committee Member  Committee Member  Reviewer, ad hoc Czech Science Foundation Review Panel Committee Member  Nember Committee Member  Reviewer, ad hoc Czech Science Foundation Review Panel Committee Member  Nember Committee Member  Reviewer, ad hoc Czech Science Foundation Review Panel Committee Member  Nember Committee Member  Committee Member  Nember Committee Member  Committee Member Committee Member  Committee Member Committee Member  Nember Committee Member Committee Member  Committee Member Committee Member  Committee Member Committee Member  Committee Member Committee Mem	1995 - 1995	NIH Expert Panel on Genetic Models and Transgenic Resources for Hypertension	Committee Member
1999 - 1999 NIH/NIDDK Review Panel on Diabetic and Non-Diabetic Susceptibility Genes  NIH Special Emphasis Panel on Minority Research Training  NIH Special Emphasis Panel on Experimental Committee Member  1999 - 1999 NIH Special Emphasis Panel on Experimental Cardiovascular Sciences Member  2000 - 2000 NIH Review Panel: SCOR Programs on Molecular Genetics of Hypertension Member  2004 - 2004 NIH/NHLBI Expert Panel on Future Directions in Hypertension Research Member  2005 - 2005 NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications Member  2007 - 2007 British Heart Foundation Research Programme Review Committee Member  2009 - 2009 NIH/NHLBI Clinical and Integrative Cardiovascular Science Reviewer, ad hoc Study Section  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc Committee Member  2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2013 Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Member	1995 - 1995	·	
Susceptibility Genes Member  1999 - 1999 NIH Special Emphasis Panel on Minority Research Training Member  1999 - 1999 NIH Special Emphasis Panel on Experimental Committee Member  2000 - 2000 NIH Review Panel: SCOR Programs on Molecular Genetics of Hypertension Member  2004 - 2004 NIH/NHLBI Expert Panel on Future Directions in Hypertension Research Member  2005 - 2005 NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications Member  2007 - 2007 British Heart Foundation Research Programme Review Member  2009 - 2009 NIH/NHLBI Clinical and Integrative Cardiovascular Science Member  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc Study Section  2001 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Member	1996 - 1996	NIH Experimental Cardiovascular Sciences Study Section	Reviewer, ad hoc
Training Member  1999 - 1999 NIH Special Emphasis Panel on Experimental Committee Member  2000 - 2000 NIH Review Panel: SCOR Programs on Molecular Genetics of Hypertension Member  2004 - 2004 NIH/NHLBI Expert Panel on Future Directions in Hypertension Research Member  2005 - 2005 NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications Member  2007 - 2007 British Heart Foundation Research Programme Review Committee Member  2009 - 2009 NIH/NHLBI Clinical and Integrative Cardiovascular Science Study Section  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc  2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Member	1999 - 1999		
Cardiovascular Sciences Member  2000 - 2000 NIH Review Panel: SCOR Programs on Molecular Genetics of Hypertension Member  2004 - 2004 NIH/NHLBI Expert Panel on Future Directions in Hypertension Research Member  2005 - 2005 NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications Member  2007 - 2007 British Heart Foundation Research Programme Review Committee Member  2009 - 2009 NIH/NHLBI Clinical and Integrative Cardiovascular Science Reviewer, ad hoc Study Section  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc Committee Member  2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Member	1999 - 1999	·	
Genetics of Hypertension Member  2004 - 2004 NIH/NHLBI Expert Panel on Future Directions in Hypertension Research Member  2005 - 2005 NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications Member  2007 - 2007 British Heart Foundation Research Programme Review Committee Member  2009 - 2009 NIH/NHLBI Clinical and Integrative Cardiovascular Science Reviewer, ad hoc Study Section  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc Committee Member  2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Member	1999 - 1999	·	
Hypertension Research  2005 - 2005  NIH/NHLBI Scientific Review Panel for Supplemental Applications to NIH Program in Genomic Applications  British Heart Foundation Research Programme Review  Committee Member  2009 - 2009  NIH/NHLBI Clinical and Integrative Cardiovascular Science Reviewer, ad hoc Study Section  2009 - 2009  NIH/NHLBI RFA Challenge Grants Panel  Czech Science Foundation Review Panel  Committee Member  2012 - 2012  Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section  Member	2000 - 2000	<b>G</b>	
Applications to NIH Program in Genomic Applications  2007 - 2007  British Heart Foundation Research Programme Review  Committee Member  2009 - 2009  NIH/NHLBI Clinical and Integrative Cardiovascular Science Reviewer, ad hoc Study Section  2009 - 2009  NIH/NHLBI RFA Challenge Grants Panel  Reviewer, ad hoc Czech Science Foundation Review Panel  Committee Member  2012 - 2012  Max Delbruck Center for Molecular Medicine, External Review Panel  NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section  Member  Committee Member	2004 - 2004	•	
Member  2009 - 2009 NIH/NHLBI Clinical and Integrative Cardiovascular Science Reviewer, ad hoc Study Section  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc Committee Member  2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel  2102 - 2013 NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Member	2005 - 2005	• • • • • • • • • • • • • • • • • • • •	
Study Section  2009 - 2009 NIH/NHLBI RFA Challenge Grants Panel Reviewer, ad hoc  2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel Member  2102 - 2013 NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Committee Member	2007 - 2007	British Heart Foundation Research Programme Review	
2011 - 2012 Czech Science Foundation Review Panel Committee Member  2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel Committee Member  2102 - 2013 NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section Committee Member	2009 - 2009	<u> </u>	Reviewer, ad hoc
2012 - 2012 Max Delbruck Center for Molecular Medicine, External Review Panel  2102 - 2013 NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section  Member  Committee Member	2009 - 2009	NIH/NHLBI RFA Challenge Grants Panel	Reviewer, ad hoc
Review Panel  2102 - 2013 NIH Special Emphasis Panel Scientific Review Group, Genetics of Health and Disease Study Section  Member  Member	2011 - 2012	Czech Science Foundation Review Panel	
Genetics of Health and Disease Study Section Member	2012 - 2012	·	
2015 - 2016 Czech Science Foundation, Scientific Review Panel Grant Reviewer	2102 - 2013	·	
	2015 - 2016	Czech Science Foundation, Scientific Review Panel	Grant Reviewer

2014 - 2016	Berlin Institute of Health, Berlin, Germany Scientific Grant Review Panel	Committee Member
2016 - 2016	NIH/NHLBI Program Project Review Study Section, Cardiovascular Systems Dynamics, Hypertension, and Hypertensive Disease	Grant Reviewer
2017 - 2017	Department of Pharmacology, University of Iowa College of Medicine, 5 Year Faculty Member Review	External Reviewer
2017 - 2017	Czech Science Foundation and Grant Agency of the Czech Republic	Grant Reviewer
2018 - 2018	Max Delbrück Center for Molecular Medicine, Scientific Advisory Board, Berlin, Germany	External Reviewer

# **UNIVERSITY AND PUBLIC SERVICE**

# UNIVERSITY SERVICE UC SYSTEM AND MULTI-CAMPUS SERVICE

UC SYSTEM AND MULTI-CAMPUS SERVICE				
2002 - 2004	Executive Board, University Pathology Consortium	UCSF representative		
UCSF CAMPU	SWIDE			
1999 - 2000	Chest Pain Management Committee, UCSF-Stanford Health Care	UCSF representative		
2004 - 2005	Technical Liaison Committee, UCSF and Blood Systems Inc	Committee Member		
1999 - 2010	UCSF General Clinical Research Center Advisory Committee	Committee Member		
2003 - present	Clinical Laboratory Compliance Committee covering UCSF Moffitt-Long, Mission Bay, and Mt Zion Medical Centers	Committee Member		
2011 - present	Clinical Laboratory Quality Improvement Committees, UCSF Moffitt-Long and China Basin Laboratories	Committee Member		
2016 - 2018	Lowering Our Costs Clinical Laboratories Utilization Team	Committee Member		
SCHOOL OF N	MEDICINE			
2002 2002	Ad has Dramatian Committee LICCE Cohool of Madisina	Committee Marshar		

2003 - 2003	Ad hoc Promotion Committee, UCSF School of Medicine	Committee Member
2003 - 2008	Medical Student With Thesis Committee, UCSF School of Medicine	Committee Member
2004 - 2004	Ad hoc Promotion Committee, UCSF School of Medicine	Committee Chair

2000 - 2000	Faculty Search Committee for Director of Microbiology Laboratories, UCSF School of Medicine	Committee Member
2002 - 2002	Faculty Search Committee for Director of Laboratory Information Services, UCSF School of Medicine	Committee Member
2010 - 2011	Faculty Search Committee for Director of Mass Spectrometry Clinical Laboratory, UCSF School of Medicine	Committee Chair
2011 - 2011	Stewardship Review Committee of the Department Chair of Laboratory Medicine	Interviewee
2012 - 2012	Stewardship Review Committee, The UCSF Center for Reproductive Sciences	Member
2017 - 2017	Five Year Review of Department Chair, UCSF Department of Laboratory Medicine	Interviewee
DEPARTMEN	TAL SERVICE	
1999 - 1999	Chair's 5 year Review Committee, UCSF Dept. of Laboratory Medicine	Committee Member
1999 - 1999	Indirect Cost Recovery Committee, UCSF Dept. of Laboratory Medicine	Committee Member
1999 - 2001	Editorial Committee, Newsletter for the UCSF Dept. of Laboratory Medicine	Committee Member
2003 - 2003	Faculty Retreat Committee, UCSF Department of Laboratory Medicine	Committee Member
2005 - 2005	Ad Hoc Hiring Committee for Personnel Analyst, UCSF Dep of Laboratory Medicine	t Committee Member
1999 - 2013	Chair's Advisory Committee, UCSF Department of Laboratory Medicine	Committee Member
2006 - 2013	CME Grand Rounds Planning Committee, UCSF Department of Laboratory Medicine	Committee Member
2014 - 2015	Departmental Advisory Committee (DAC) on compensation, UCSF Dept of Laboratory Medicine	Member
1999 - present	Residency Training/Selection Committee, UCSF Department of Laboratory Medicine	Interviewer
2006 - present	Planning Committee for Kabra and Brecher Lectures, UCSF Department of Laboratory Medicine	Committee Member
2006 - present	Committee on Animal Research, UCSF Department of Laboratory Medicine	Committee Member
1999 - present	Committee on Appointments, Promotions, and Merit, UCSF Dept of Laboratory Medicine	Committee Chair

## **COMMUNITY AND PUBLIC SERVICE**

2014 - 2016 Development School for Youth: All Stars Project of the

Volunteer Speaker

Bay Area. Organizer and presenter of STEM workshops

for high school students

2012 - present All Stars Project of the Bay Area: Benefit Luncheon

Program Member (non-profit organization providing

performance-based development opportunities to youth throughout the Bay Area's poorest neighborhoods)

Volunteer Supporter/Donor

### **TEACHING AND MENTORING**

#### **FORMAL TEACHING**

Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
present	,	Lectures in Clinical Chemistry	Medicine	6 -10

#### INFORMAL TEACHING

2002 - present Teaching of lab students and fellows experimental hypertension research (100 hrs/yr)

2002 - present Supervision and teaching of Laboratory Medicine Residents in Clinical Chemistry (100 hrs/yr)

## PEER REVIEWED PUBLICATIONS

- 1. Hsu CH, Kurtz TW, Easterling RE, Weller JM: Potentiation of gentamicin nephrotoxicity by metabolic acidosis. Proc Soc Exper Biol Med. 146: 894-897, 1974.
- 2. Hsu CH, Kurtz TW, Preuss HG, Weller JM: Measurement of renal blood flow in the rat. Proc Soc Exper Biol Med 149:470-472, 1975.
- 3. Hsu CH, Kurtz TW, Goldstein JR, Keinath RD, Weller JM: Intrarenal hemodynamics in acute myohemoglobinuric renal failure. Nephron 17:65-72, 1976.
- 4. Hsu CH, Kurtz TW, Weller JM: The role of tubular necrosis in the pathophysiology of acute renal failure. Nephron 17:204-214, 1976.
- 5. Kurtz TW, Maletz RM, Hsu CH: Renal cortical blood flow in glycerol-induced acute renal failure in the rat. Circ Res 38:30-35, 1976.
- 6. Hsu CH, Kurtz TW: Effects of sodium intake on renal cortical blood flow distribution. Proc Soc Exper Biol Med 151:475-477, 1976.
- 7. Hsu CH, Kurtz TW, Waldinger TP: Cardiac output and renal blood flow in glycerol induced acute renal failure in the rat. Circ Res 40:178-182, 1977.

- 8. Hsu CH, Kurtz TW, Rosenzweig J, Weller JM: Renal hemodynamics in HgC12 induced acute renal failure. Nephron 18:326-332, 1977.
- 9. Hsu CH, Kurtz TW, Rosenzweig J, Weller JM: Intrarenal hemodynamics and ureteral pressure during ureteral obstruction. Investigative Urology 14:442-445, 1977.
- 10. Hsu CH, Kurtz TW, Weller JM: In vitro uptake of gentamicin by rat renal cortical tissue. Antimicrobial Agents Chemotherapy 12:192-194, 1977.
- 11. Hsu CH, Maletz RM, Rozas W, Kurtz TW: Renal tubular sodium and water excretion in antibiotic induced nephrotoxicity. Nephron 20:227-234, 1978.
- 12. Hsu CH, Kurtz TW, Rosenzweig J, Weller JM: Intrarenal hemodynamics and renal function in post-obstructive uropathy. Investigative Urology 15:348-351, 1978.
- 13. Kurtz TW, Hsu CH: Systemic hemodynamics in HgC12 induced acute renal failure. Nephron 21:100-106, 1978.
- 14. Hsu CH, Kurtz TW, Massari PU: Familial Azotemia: Impairment of renal urea excretion. N Engl J Med 298:117-121, 1978.
- 15. Kurtz TW, Hsu CH: Impaired distal nephron acidification in chronically phosphate depleted rats. Pfluegers Arch 377:229-234, 1978.
- 16. Kurtz TW, Hsu CH: Resolution of chylothorax after positive end- expiratory pressure ventilation. Arch Surg 115:73-74, 1980.
- 17. Hsu CH, Kurtz TW, Sands CE: Intrarenal vascular resistance in glycerol induced acute renal failure. Circ Res 45:583-587. 1980.
- 18. Hsu CH, Kurtz TW, Slavicek J: Effects of exogenous angiotensin II on renal hemodynamics in the awake rat. Circ Res 46:646-650. 1980.
- 19. Hsu CH, Kurtz TW: Renal hemodynamics in experimental acute renal failure. Nephron 27:204-208, 1981.
- 20. Hsu CH, Slavicek JM, Kurtz TW: Segmental renal vascular resistance in the spontaneously hypertensive rat. Am J Physiol 242:H961-H966, 1982.
- 21. Kurtz TW, Slavicek JM, Hsu CH: Blood viscosity in experimental acute renal failure. Nephron 30:348-351, 1982.
- 22. Kurtz TW, Morris RC Jr: Dietary chloride as a determinant of "sodium-dependent" hypertension. Science 222:1139-1141, 1983.
- 23. Kurtz TW, Morris RC Jr: Dietary chloride and bicarbonate as determinants of desoxycorticosterone hypertension. J Hypertension 2:371-373, 1984.
- 24. Kurtz TW, Morris RC Jr: Dietary chloride as a determinant of disordered Ca metabolism in salt?dependent hypertension. Life Sci 36:921-929, 1985
- 25. Kurtz TW, Morris RC: "Hypertension" in the Dahl salt-sensitive rat despite a diet deficient in sodium chloride. Science 230:808-810, 1985
- 26. Kurtz TW, Kabra PM, Booth BE, et. al.: Liquid chromatographic measurements of inosine, hypoxanthine, and xanthine in the study of fructose-induced degradation of adenine nucleotides in man and in the rat. Clin Chem 32:782-786, 1986

- 27. Kurtz TW, Hsu CH: Effects of furosemide diuresis on mercuric chloride induced acute renal failure in the rat. Nephron 43:279-282, 1986
- 28. Kurtz TW, Portale AA, Morris RC: Evidence of a difference in vitamin D metabolism between Spontaneously Hypertensive rats and Wistar-Kyoto rats. Hypertension 8:1015-1020, 1986
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